# INTER-GOVERNMENTAL AGREEMENT between the NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY and the CITY OF LINOCLN

# Regarding the Implementation of the Section 319 Project Entitled

# "Antelope Creek Main Stem Water Quality Project"

THIS INTER-GOVERNMENTAL AGREEMENT is made and entered into by and between the Nebraska Department of Environmental Quality (NDEQ) and the City of Lincoln, (Sponsor) in accordance with the Interlocal Cooperation Act, Nebraska Stat. Sec. 13-801 to 13-807 (Reissue 1987) or Nebr. Rev. Stat. Sec. 81-1504 (Supp. 1997) of the Nebraska Environmental Protection Act, whichever is applicable.

WHEREAS, the Sponsor made a request to the NDEQ for Section 319 grant funds, pursuant to the federal Clean Water Act and the Nebraska Nonpoint Source (NPS) Management Program, which have been made available to NDEQ through the Region VII Office of the U.S. Environmental Protection Agency (EPA); and

WHEREAS, these grant funds in an amount up to **\$270,000** are to be used to implement this Section 319 NPS Project; and

WHEREAS, the Sponsor agrees to contribute at least \$180,000 in nonfederal match as cash and/or services in-kind for implementation of project activities; and

WHEREAS, the Sponsor agrees to comply with all provisions of the federal Clean Water Act as amended by the Water Quality Act of 1987, 33 U.S.C. §1251 et seq. and intends to use the funds as set out in this Agreement; and

NOW, THEREFORE, the parties do hereby agree to the terms and conditions of this Agreement as follows:

#### I. TERM OF AGREEMENT

This Agreement will begin on **July 1, 2009** and will remain in effect until all identified tasks are completed for this Section 319 Project, unless terminated under §Q of this inter-governmental agreement, but will not remain in effect past **December 31, 2011**.

#### II. CONDITIONS OF AGREEMENT

#### A. General Conditions

The Sponsor agrees to complete a detailed Project Implementation Plan (PIP) outlining the project schedule and specific work items to be undertaken during the course of the project. This PIP must be approved by USEPA and NDEQ prior to any reimbursement request from Section 319 grant funds. A Quality Assurance Project Plan (QAPP) must be approved by NDEQ prior to any collection of environmental data and subsequent reimbursement request from Section 319 grant funds for monitoring activities.

- 2. The Sponsor agrees to submit semi-annual progress reports to the NDEQ by March 30 and September 30 each year for the duration of the project agreement. These reports shall contain the following components:
  - a. Progress to date
  - b. Significant findings or events
  - c. Corrective actions taken to resolve any problems that are encountered
  - Activities planned for the next reporting period
- 3. The Sponsor agrees that if indirect costs are authorized, as specified in the approved PIP, they will be charged at the approved indirect rate.
- 4. The Sponsor agrees that any contract, inter-governmental agreement, sub-agreement and/or procurement of equipment under this grant must receive NDEQ approval prior to expenditure of funds associated with those transactions. Copies of all sub-agreements and inter-governmental agreements will be provided to the NDEQ.
- 5. All equipment purchased with Section 319 grant funds must be approved by the NDEQ. Any such purchased equipment shall be retained by the NDEQ upon completion of the project unless otherwise authorized in writing by the NDEQ.
- 6. The Sponsor agrees that all water quality data collected under this grant shall be provided to the NDEQ.
- 7. The Sponsor agrees to recognize the contributions and/or involvement of the federal Nonpoint Source Management Program (authorized by Section 319 of the Clean Water Act and administered by EPA and NDEQ) in project publicity, reports, newsletters, and other materials. The Sponsor shall work with the NDEQ to ensure that all necessary peer review requirements are met prior to publication. A minimum of 6 copies of outreach material (printed or other media) produced under this grant shall be provided to the NDEQ unless otherwise specified.
- 8. The Sponsor agrees to ensure that persons receiving cost-share assistance from Section 319(h) funds shall, where relevant, practice nutrient and pest management on those portions of their operations that fall in the critical area of the project.
- 9. The Sponsor agrees to maintain all practices or structural Best Management Practices developed or constructed under Section 319, consistent with the operation and maintenance requirements for structures or practices as described in standard engineering design or as identified in the Natural Resources Conservation Service's Field Office Technical Guides or other appropriate federal/state/local standards.
- 10. A final project report must be submitted to NDEQ within 90 days after completion of project tasks, but no later than the termination date of this agreement.

#### B. Grant Conditions

The following grant conditions shall be complied with by all recipients of federal grant funds.

- 1. The Sponsor agrees to comply with all the following provisions, rules and regulations (can be obtained from NDEQ):
  - a. Office of Management and Budget Circulars A-102, A-133, A-87 and 40 CFR Parts 31, 32, and 35.
  - b. Procurement standards of 40 CFR 31.32(g).
  - c. Prohibitive lobbying 18 U.S.C. Section 1913, Section 607(a) of Public Law 96.74, or Section 319 of Public Law 101-121.
  - d. Federal Register, Vol. 53, No. 102, Debarment and Suspension Under EPA, Assistance Loan and Benefit Programs.

- e. Rules governing "Fair Share" of federal funds to Minority Business Enterprises (MBEs), Women-owned Business Enterprises (WBEs), Small Business Enterprises (SBEs), Small Disadvantaged Businesses (SDBs), and Small Business in Rural Areas (SBRAs). Affirmative steps outlined in 40 CFR 30.44, or 40 CFR 33.240, or 40 CFR 35.6580, or Section 129 of Public Law 100-590, whichever is applicable. ("Fair Share" Percentages: Supplies, 5% MBE, 12% WBE; Equipment, 6% MBE, 11% WBE; Services, 5% MBE, 11% WBE; and Construction, 6% MBE, 8% WBE.) The Sponsor agrees to include in its bid specifications, and require all of its prime contractors to include in their bid specifications for subcontracts, a "Fair Share". The Sponsor agrees to document the official grant files with all efforts taken to achieve the "Fair Share" and to report quarterly to NDEQ all "Fair Share" procurement efforts regardless of the size of the sub-agreement.
- f. Section 204 of the Demonstration Cities and Metropolitan Development Act of 1996 as amended (42 USC Section 3334).
- g. Provisions of the American with Disabilities Act.
- h. Hotel and Motel Fire Safety Act of 1990.
- i. EPA Order 1000.25 regulating the use of recycled paper.

#### C. Statement of Costs

The Sponsor will submit no more often than once per calendar month a properly documented statement of costs for which reimbursement is sought and nonfederal match is claimed pursuant to the terms of this Agreement and the PIP. This statement of costs shall be signed by the Sponsor's authorized representative. For purposes of this agreement, reimbursable costs and nonfederal match claims shall be related to budget items as described in the approved PIP. Documentation of costs shall consist of paid receipts, signed time records, and/or similar verification of expenditures.

#### D. Disbursements

- All requests for reimbursement of costs incurred by the Sponsor shall be reviewed within ten (10) working days of their receipt by the NDEQ. If costs are deemed ineligible, the Sponsor shall be notified by the NDEQ within ten (10) working days of the receipt of the request. Within forty-five (45) working days after the receipt of a properly documented reimbursement request, the NDEQ shall transmit payment to the Sponsor, the amount of the eligible cost. The NDEQ shall not be held responsible for delays in payment, due to causes beyond its control.
- 2. Payment will be contingent on required quarterly progress reports and quarterly MBE/WBE reports being current.
- 3. NDEQ shall withhold 10%, but not less than \$10,000, of grant funds pending receipt and approval of the final project report.
- 4. The total amount of payments under this Agreement shall not exceed two hundred seventy thousand dollars (\$270,000).
- The Sponsor agrees to contribute at least one hundred eighty thousand dollars (\$180,000) in nonfederal match as cash and/or services in-kind for implementation of project activities.

#### E. Work Description and Schedule

This project shall complete objectives and work items as described in the PIP. The PIP is hereby incorporated into this document in its entirety.

#### F. Amendments

This agreement may be amended in writing at any time by mutual agreement of the parties, except insofar as any proposed amendments are in any way contrary to applicable law or requirements of the EPA or NDEQ.

#### G. Forfeiture, Repayment and Delays in Disbursement of Funds

Violation of any of the conditions of this Agreement by the Sponsor or failure of the Sponsor to complete and maintain the project in the manner described in the PIP, including any amendments thereto which have been properly approved, shall result in the forfeiture of any funds not disbursed. In addition, if for any reason the project is not completed as described in the project PIP, including any amendments thereto that have been or are hereafter approved by the NDEQ, the NDEQ may recover from the Sponsor any or all funds disbursed.

#### H. Remedies Not Exclusive

The use by either the Sponsor or the NDEQ of any remedy specified herein for the enforcement of this Agreement is not exclusive and shall not deprive the party from using such remedy, or limit the application of any other remedy provided by law.

# I. Assignment

No assignment or transfer of this agreement or any part hereof, rights hereunder, or interest herein by the Sponsor shall be valid unless and until it is approved by the NDEQ and made subject to such reasonable terms and conditions as the NDEQ may impose.

#### J. Waiver of Rights

The Sponsor or NDEQ may from time to time waive any of their rights under this Agreement. However, any waiver of rights with respect to a default of any condition of this Agreement shall not be deemed to be a waiver with respect to any other default.

#### K. Applicable Rules and Regulations

Both parties shall abide by all applicable rules and regulations of the NDEQ, including any that may be adopted subsequent to the effective date of this Agreement, except those that would invalidate or be inconsistent with the provisions of this Agreement.

#### L. Inspection of Books, Records and Reports

The duly authorized representative of either party shall have the right to inspect and make copies of any books, records or reports of the other party pertaining to this Agreement or related matters during regular office hours. Each party shall maintain and make available for such inspection accurate records of all its costs, disbursements and receipts with respect to its activities under this Agreement. A single audit is required if \$500,000 or more is provided by the federal funding in any one year period. Verification of completion of the single audit report shall be sent to NDEQ.

#### M. Independent Contractor

The Sponsor is and shall perform this Agreement as an independent contractor and as such shall have and maintain exclusive control over all of its employees, agents and operations. Neither the Sponsor nor any person employed by the Sponsor shall act,

propose to act or be deemed the NDEQ's agent, representative or employee. The Sponsor assumes full and exclusive responsibility for the payment of all premiums, contributions, payroll taxes and other taxes now or hereafter required by any law or regulation and agrees to comply with all applicable laws, regulations and orders relating to social security, unemployment compensation, OSHA, affirmative action, equal employment opportunity and other laws, regulations and orders of like nature. For any work hereunder subject to the Veterans Readjustment Assistance Act of 1974, or the Rehabilitation Act of 1973, the parties hereto shall comply with all provisions thereof, together with all applicable rules, regulations and orders of the Department of Labor, and the notices required pursuant to 41 CFR 60-1.4, 60-250.4 and 60-741.4 which are hereby incorporated by reference into this Agreement.

#### N. Nondiscrimination

The Nebraska Fair Employment Practice Act prohibits contractors to the State of Nebraska and their subcontractors from discriminating against any employee, or applicant for employment in the performance of such contracts, with respect to hire, tenure, terms, conditions or privileges of employment because of race, color, religion, sex, disability or national origin. The Sponsor's signature is a guarantee of compliance with the Nebraska Fair Employment Practice Act, and breach of this provision shall be regarded as a material breach of this Agreement. The Sponsor shall insert a similar provision in all subcontracts for services to be covered by any contract resulting from this Agreement.

#### O. Drug Free Workplace

The Sponsor by executing this Agreement, certifies and assures that it operates a drug free workplace as addressed in the State of Nebraska Drug Free Workplace Policy of July 7, 1989.

#### P. Publication Rights

All parties shall have publication and reproduction rights for all reports and materials, which are produced as a result of this Agreement.

#### Q. Termination

This agreement may be terminated in whole or in part in writing by either party in the event of substantial failure by the other party to fulfill its obligations under this Agreement through no fault of the terminating party, provided that no termination may be effected unless the other party is given:

- Not less than ten (10) calendar days' written notice (delivered by certified mail, return receipt requested) of intent to terminate, and
- 2. An opportunity for consultation with the terminating party prior to termination.

#### R. Project Managers

The Project Manager for each party to this agreement shall be as follows. The Project Manager may be changed by any agency upon written notification.

NDEQ Project Manager
Mary Schroer
Program Specialist
Water Quality Planning Unit
402-471-6988
mary.schroer@nebraska.gov

Sponsor Project Manager
Ed Kouma
City of Lincoln, 901 N 6<sup>th</sup> Street
Lincoln, NE 68508
402-441-7018
ekouma@lincoln.ne.gov

# III. SIGNATORIES TO THE INTER-GOVERNMENTAL AGREEMENT

NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY					
Sig: Thomas Tamburn Print: Thomas R. Lamberson	Tiitle:	Deputy Director			
Date: <u>5-28-09</u>					
SPONSOR					
Sig: Print: Chris Beutler	Title:		Mayor		
Date: Federal Tax ID	Number:				

# **Section 319 Project Implementation Plan**

"Antelope Creek Main Stem Water Quality Project"

# **Submitted To**

Nebraska Department of Environmental Quality U.S. Environmental Protection Agency

April 1, 2009

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Attachment: Project Area Map

# PROJECT SUMMARY

Project Title: "Antelope Creek Main Stem Water Quality Project"

Project Sponsor: City of Lincoln, Nebraska, Public Works & Utilities, Watershed

Management Division, 901 N 6<sup>th</sup> Street, Lincoln, Nebraska, 68508

Project Contact: Ed Kouma

901 N. 6<sup>th</sup> Street

Lincoln, Nebraska, 68508

402-441-7018

ekouma@lincoln.ne.gov

Section 319 Funding Amount (FY08): \$270,000

Nonfederal Match Requirement: \$180,000

Project Duration: July 2009 – December 2011

#### INTRODUCTION

The Project Area is in the Antelope Creek drainage above Holmes Lake Reservoir. The watershed above Holmes Lake has a drainage area of approximately 5.4 square miles (3,456 acres) consisting mainly of residential and commercial property land use. Holmes Lake lies on Antelope Creek and is fed by two drainages which enter the lake from the south/southeast. The drainages are well defined and consist of about 20 stream miles of open channel including their tributaries. Due to urbanization some of the original tributaries no longer exist. Holmes Lake is formed by a high hazard dam constructed for flood control and the lake provides multiple benefits other than flood reduction including aesthetics, fish and wildlife habitat, and recreation.

Holmes Lake was recently on the 303(d) list of impaired waters due to impairment of the aesthetic and aquatic life beneficial uses due to excess sedimentation and nutrients. Through partial implementation of the watershed management plan, Holmes Lake has been removed from the 2008 303d list. To ensure this lake stays off the 303d list, City of Lincoln would like to perform additional work in the Main Stem of Antelope Creek, immediately upstream of Holmes Lake. A Total Maximum Daily Load (TMDL) was developed for Holmes Lake by Nebraska Department of Environmental Quality (NDEQ) in June 2003 with the primary pollutant concerns being sedimentation and phosphorus.

Several watershed projects have been completed in recent years to improve the water quality in the lake and in the watershed. In 2005 a major renovation of the lake was completed which

involved deepening the lake, stabilizing the shoreline, creating wetland areas and improving the fishery. In 2007 and 2008 a project entitled "Holmes Lake Water Quality Pollution Reduction" project was conducted which involved a geomorphic assessment of the watershed, stream stabilization measures on the southwest tributary and a public education effort to educate people about no/low phosphorus fertilizer, lawn care and best management practices such as rain gardens and rain barrels. Also 20 rain gardens were constructed and 20 rain barrels were placed within the watershed. This is being followed up currently with a 100 rain garden program throughout the City with approximately 15 targeted for the Holmes Lake Watershed. Problem areas which were identified in the geomorphic assessment were prioritized in terms of the severity of the existing problem area, feasibility of construction and total potential benefits of improving impaired water quality in Holmes Lake.

The "Antelope Creek Main Stem Water Quality Project" was identified in the assessment and prioritization effort as the highest priority problem area within the Holmes Lake watershed. This project is immediately upstream of Holmes Lake in the area referred to as the "Dog Run", a popular park set aside for dogs to run unleashed. The park is heavily used and the vegetative cover growth in this area cannot keep up with the frequent foot traffic from dogs and owners. The resulting bare ground thereby has little resistance to erosion from surface runoff and creek flow. The sediment generated from this continued erosion could inevitably bypass the downstream wetlands and migrate to Holmes Lake. This problem is both a localized bank stability problem and a water quality issue due to potential sediment and nutrient loading from runoff. Some areas of stream erosion have left vertical stream banks which are highly susceptible to more severe erosion. The proposed project involves contracting with an engineering consultant to provide the following components:

- 1. Stabilize unstable stream banks (vertical and those susceptible to erosion) on Antelope Creek between Pioneers Boulevard and 70<sup>th</sup> Street. Stabilize them with such items as composite revetment, rock toes with fabric and plantings, geogrid walls with live staking, etc. Other improvements would also include features such as a vegetated stream buffer and at least one well defined and stabilized crossing for foot traffic.
- 2. Vegetate and protect areas for high foot traffic through the use of items such as grass pavers or geogrid materials.
- 3. Construct approximately 2.8 acres of additional water quality wetlands to improve water quality.

The purpose of the project is to stabilize eroding areas adjacent to the stream banks and install water quality wetlands, stream vegetated buffer and foot traffic management enhancements.

# PROJECT GOALS

Goal 1. Reduce the amount of stream bank erosion and channel degradation, upstream of Holmes Lake. Of the twenty miles of open channel in the Holmes Lake watershed approximately 3.2 miles consist of channels with eroding banks. Assuming a sediment load of around 10,000 tons per year (Holmes Lake TMDL of 2003), and little or no construction sites in the watershed, it is estimated that a significant portion (approximately 80 %) of the sediment load is from eroding banks. Given that this project will significantly reduce stream erosion for 9% of the eroding banks, it is estimated that this project will reduce the sediment load by approximately 700 tons per year.

**Objective 1**. Stabilize stream banks between Pioneers Blvd. and 70<sup>th</sup> Street to reduce sediment loading to Holmes Lake.

**Objective 2.** Construct, vegetate and protect areas from high foot traffic to reduce sediment loading to Holmes Lake.

Goal 2. Reduce the amount of nutrients entering Antelope Creek just upstream of Holmes Lake. The wetlands for this project could treat approximately 1,800 acres of watershed upstream of the wetlands. This is 52 % of the watershed. Given an estimated load of 8,000 lbs per year (ref. Holmes Lake TMDL, 2003) and a wetland percentage reduction of 60 % it is assumed that the wetlands will reduce phosphorus loading by 2,500 lbs. per year.

**Objective 1.** Construct water quality wetlands to reduce phosphorus loading to Holmes Lake.

**Objective 2.** Construct stream buffers to reduce phosphorus loading to Holmes Lake.

#### PROJECT PARTNERS

City of Lincoln (Watershed Management Division and Parks & Recreation Department) Lincoln Parks & Recreation Department – Assistance with construction oversight and coordination.

Nebraska Department of Environmental Quality Lower Platte South NRD - Consultation Holmes Lake Advisory Committee - Consultation Residents living in Holmes Lake Watershed – Public Education

#### WATERSHED IMPLEMENTATION PLAN

### 1. Pollutant Source

The sediment load originates largely as non-point source pollution in areas of stream bank erosion, channel degradation and other sources, and is transported in runoff water into Holmes Lake. The project area is one of the areas exhibiting signs of severe erosion and degradation. Phosphorous which comes from existing phosphorus in the soils, animal wastes and other sources enters the stream both through the channel degradation and in overland flow water which picks up and carries nutrients directly into the stream. In 2003 the annual sediment load was estimated at over 10,000 tons/year and the annual phosphorous load was estimated at over 8,000 lbs/year. (Holmes Lake TMDL, 2003)

#### 2. Load Reduction

In 2003 the annual loading capacity in Holmes Lake for sediment determined by the NDEQ (Holmes Lake TMDL, 2003) was 5,000 tons per year and the annual loading capacity for phosphorous was determined to be 260 pounds per year. The goal for pollutant load reduction is to reduce the annual sediment load of 10,000 tons/year to the lake's capacity of 5,000 tons/year and to reduce the annual phosphorus load from 8,000 lbs/year to the lake's capacity of 260 lbs/year. The pollutant reduction estimated for this project is a reduction of 700 tons per year for sediment and 2,500 lbs. per year for phosphorus.

#### 3. Management Practices

Bank regrading and placement of erosion fabric with plantings will be used as one method to stabilize the banks. Other methods may include the establishment of a geogrid wall using

fabric and bare root plantings up to the bank full level where appropriate to enhance stability and/or composite revetments. Particular attention will be paid to the vegetated transitions between the fabric and rock where rock is used. Vegetated stream buffers will be incorporated as well as approximately 2.8 acres of water quality wetlands. Other methods of protecting vegetation may be considered in high foot traffic areas and points of stream access such as grass pavers. The City will look for ways to spread out and avoid concentrated foot traffic along the creek banks such as vegetation type and density to encourage or discourage foot traffic.

#### 4. Information and Education

Signage will be provided during construction to explain the project. The very visible location of the project creates the opportunity to educate citizens who will see the project and have questions.

- -Permanent signage will be put in place to educate visitors to the park about water quality. Heavy usage of the project area by dog owners and others will make signage effective and provide a medium to educate the reader about water quality issues which apply City-wide and throughout the state.
- -A brochure will be created and made available at the project area to educate on the importance of picking up dog waste. Although dog owners for the most part are conscientious about cleaning up after their dogs, efforts will continue to remind dog owners of cleaning up dog waste.

#### 5. Schedule

-Summer 2009 Design stream channel improvements

-Spring 2010 Construction of stream channel improvements

-Fall 2010 Establish permanent vegetation

-Summer 2011 Monitor for post construction conditions

-December 2011 Final report due

#### 6. Milestones

- 1. Selection of consultant
- 2. Final construction design
- 3. Construction complete, temporary vegetation
- 4. Permanent vegetation established
- 5. Post construction monitoring

#### 7. Evaluation Criteria

The water quality monitoring of Holmes Lake which is being done by others will be the method by which the effectiveness of this project will be gauged. Both sediment load and phosphorus load should decrease with this project. An evaluation of existing data (average summer total phosphorus concentrations and average total suspended solids in Holmes Lake) will be compared to the same type of data to be gathered in the summer of 2011. The effectiveness of public education efforts will be evaluated by a survey of park users and Holmes Lake Watershed residents about dog waste at the project area both before and after the

project. The final report for this 319 grant will include the linear feet of channel and stream bank improvements, and the square feet of wetland, and riparian revegetation areas.

#### 8. Resources

The budget consists of \$270,000 of Federal Section 319 grant funds which will be matched with \$180,000 of non-federal City funds for a total project budget of \$450,000. The amount is the estimate from the Holmes Lake Watershed Geomorphic Assessment, July 2007 Report, which is described as "Intervention Water Quality 6".

Budget Category	Federal Section 319	Non-Federal Funding	Totals
Personnel			
Travel			
Equipment			
Supplies			
Contractual*	\$270,000	\$180,000	\$450,000
Other			
Direct Costs	\$270,000	\$180,000	\$450,000
TOTAL COST	\$270,000	\$180,000	\$450,000

<sup>\*</sup> Expenses for contractual work include \$12,700 for surveys, \$82,800 for the design and construction observation of stream stability and water quality features, \$292,000 for construction of the features and approximately \$62,500 for creation of wetland or stream buffer enhancements.

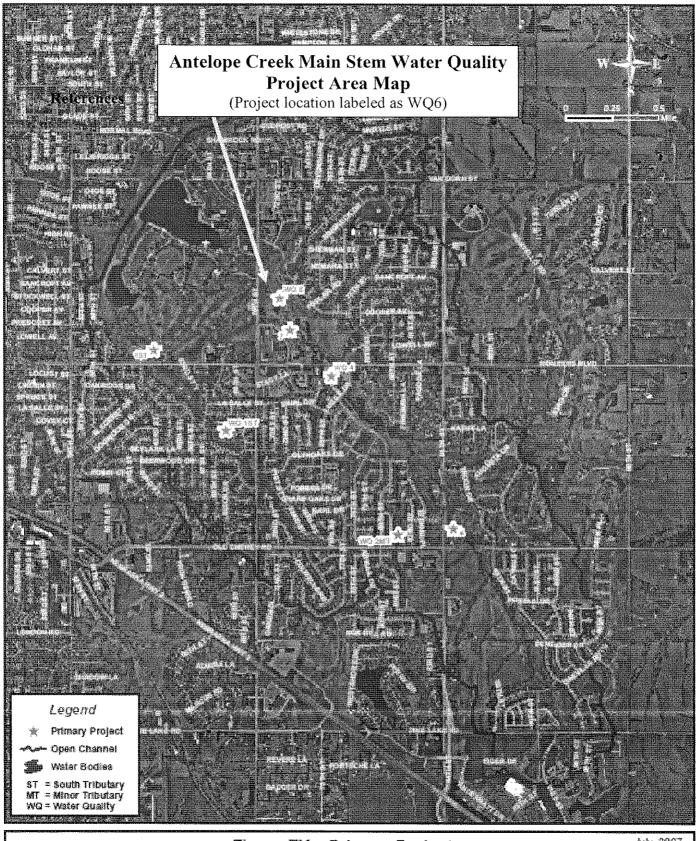




Figure EX.a Primary Projects
Holmes Lake Geomorphic Assessment
Lincoln, Nebraska
City Project #702250 JEO Project #385D18



# **PUBLIC WORKS & UTILITIES** PIONEERSBLVD **Antelope Creek Main Stem Water Quality** Project Area Map